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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
		GB92000055US1	
I hereby certify that this correspondence is being transmitted electronically to the U.S. Patent and Trademark Office on <u>January 5, 2007</u> Signature <u>[Signature]</u> Typed or printed name <u>Amelia Tauchen</u>	Application Number		Filed
	09/808,501		03/14/2001
	First Named Inventor		
	John Anthony Beaven		
	Art Unit	Examiner	
	2193	Insun Kang	
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p>			
I am the			
<input type="checkbox"/>	applicant/inventor.	Signature	
<input type="checkbox"/>	assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	D. Scott Moore	
<input checked="" type="checkbox"/>	attorney or agent of record. 42,011	Typed or printed name	
	Registration number	919-854-1400	
		Telephone number	
<input type="checkbox"/>	attorney or agent acting under 37 CFR 1.34.	January 5, 2006	
	Registration number if acting under 37 CFR 1.34	Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input type="checkbox"/> *Total of _____ forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**RESPONSE UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE--EXAMINING GROUP 2193**

Attorney Docket No. GB20000055US1 (5577-350)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Beaven et al.

Serial No.: 09/808, 501

Filed: March 14, 2001

For: *Method, System and Computer Program for Deriving and Applying Quality
of Service Specifications in a Component-Based Development Environment*

Confirmation No.: 3614

Examiner: Insun Kang

Group Art Unit: 2193

Date: January 5, 2007

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CERTIFICATION OF TRANSMISSION

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electronically to the U.S. Patent and Trademark Office on
January 5, 2007.



Amelia Tauchen

**REASONS IN SUPPORT OF APPLICANTS' PRE-APPEAL
BRIEF REQUEST FOR REVIEW AND INTERVIEW SUMMARY**

Sir:

This document is submitted in support of the Pre-Appeal Brief Request for Review filed concurrently with a Notice of Appeal in compliance with 37 C.F.R. 41.31 and with the rules set out in the OG of July 12, 2005 for the New Appeal Brief Conference Pilot Program, which have been extended indefinitely

No fee or extension of time is believed due for this request. However, if any fee or extension of time for this request is required, Applicant requests that this be considered a petition therefor. The Commissioner is hereby authorized to charge any additional fee, which may be required, or credit any refund, to IBM Deposit Account No. 09-0461.

REMARKS

Applicants hereby request a Pre-Appeal Brief Review (hereinafter "Request") of the claims finally rejected in the Final Office Action mailed October 6, 2006 (hereinafter "Final Action"). The Request is provided herewith in accordance with the rules set out in the OG dated July 12, 2005.

Applicants respectfully submit that the rejections of the currently pending claims are clearly erroneous because many of the recitations of the pending claims are not met by the cited references for at least the reasons discussed herein and in Applicants' previously filed Request For Reconsideration of July 10, 2006. Therefore, Applicants respectfully request review of the present application by an appeal conference prior to the filing of an appeal brief. In the interest of brevity and without waiving the right to argue additional grounds should this Petition be denied, Applicants will only discuss the recitations of independent Claims 1 and 18.

Independent Claims 1 and 18 are Patentable

Independent Claims 1 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the article entitled "Volume II: Technical Concepts of Component-Based Software Engineering, 2nd Edition" by Bachmann et al. (hereinafter "Bachmann") in view of U. S. Patent No. 6,006,264 to Colby *et al.* (hereinafter "Colby"). (Final Action, page 2). Independent Claim 1 is directed to a system for component-based processing and recites, in part:

...
a quality of service specification derivation element having for output an application model in combination with a quality of service specification derived by implication from relations between components, control flows, data flows, and resources;
...(Emphasis added.)

Independent Claim 18 includes similar recitations. As highlighted above, independent Claim 1 recites a quality of service specification derivation element in which a quality of service specification is derived by ***implication*** from relations between components, control flows, data flows, and resources. This is described, for example, in the Specification at page 14, lines 6 through 15, where the text explains that the quality of service specification may be derived from quality of service requirements that are explicitly attached to the components or flows and/or

from quality of service requirements that are *implicitly* derived from the relationships within a model comprising the components, control flows, data flows, and resources.

The Office Action cites section 5.2.3 of Bachmann as disclosing the use of specified quality attributes in a component-based software system. (Final Action, page 3). The Office Action further cites a passage from section 6.1 of Bachmann related to a contractually specified interface specification in which functional properties of a component are specified. (Final Action, page 3). The Office Action acknowledges, however, that "Bachman does not explicitly teach the Qos specification is derived by implication," but alleges that Colby provides the missing teachings. (Final Action, pages 3 and 4). In particular, the Final Action cites col. 3, lines 45 - 67 of Colby as teaching the derivation of "Qos requirements implicitly from the relationships of the individual components..." (Final Action, page 3).

Applicants respectfully disagree with this interpretation of the teachings of Colby. Column 3, lines 45 - 52 of Colby state:

Another advantage of the invention is that it performs admission control on a per flow basis, based on the level of local network congestion, the system resources available on the content-aware flow switch, and the resources available on the web servers front-ended by the flow switch. This allows resources to be allocated in accordance with individual flow QoS requirements. (Emphasis added).

Applicants submit that the passage reproduced above teaches that the switching system performs admission control by allocating resources to meet QoS requirements associated with individual flows. Thus, according to Colby, the relationships between flows and system resources are not used to implicitly derive a QoS specification. Rather, system resources are managed to attempt to satisfy previously specified QoS requirements that have been associated with the flows. Colby describes how QoS specifications are derived in column 9. In sharp contrast with the recitations of independent Claims 1 and 18, in which a quality of service specification is derived by *implication* from relations between components, control flows, data flows, and resources, Colby teaches defining eight QoS classes and then assigning one of the QoS classes to a flow based on the flow's calculated QoS requirements. (Colby, col. 9, lines 33 - 36). The eight predefined QoS classes are listed in Table 1 in column 9 of Colby.

In response to this argument, the Final Action appears to state that Bachmann and Colby

disclose the general concept of a component-based software model along with the general concept of a quality of service aspect to the component-based model. The Final Action further appears to state that Bachman discloses the concept of a service contract in which "contractual mutual obligations ensure that independently developed components obey certain rules so that components interact (or can not interact) in predictable ways..." (Final Action, page 9).

Applicants acknowledge that Bachman discloses a general model for component-based software design and implementation. Applicants respectfully submit that Bachmann does not disclose implicitly deriving a quality of service specification by *implication* from relations between components, control flows, data flows, and resources. In sharp contrast to the recitations of independent Claims 1 and 18, Bachmann explains in Section 6.1 that the contractually specified interface is *explicitly* implemented by a developer in an application-programming interface (API) through the use of an assertion language. (Bachman, section 6.1, first paragraph). Moreover, Bachman does not appear to contain any disclosure in section 5.2.3, where the concept of specifying a quality of service is introduced, related to the derivation of such quality of service attributes. Rather, section 5.2.3 of Bachmann appears to focus primarily on a formal notation for describing such quality of service attributes in a component-based software design. Thus, while Applicants acknowledge that Bachmann describes the use of an API that is *explicitly* created by a developer and that defines the agreements between a client and a component (Bachman, section 6.1, paragraph one, first sentence), Applicants respectfully submit that Bachmann does not disclose or suggest deriving a quality of service specification by *implication* from relations between components, control flows, data flows, and resources as recited in independent Claims 1 and 18.

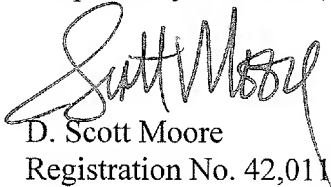
The Final Action does not address Applicants' argument set forth above regarding the failure of Colby to disclose or suggest deriving a quality of service specification by *implication* from relations between components, control flows, data flows, and resources. Instead, the Final Action simply responds with "Colby clearly states that the flow switch implicitly deduces the quality of service requirements of a flow based on the content of the flow (col. 3 lines 45 - 60)." (Final Action, page 9). Applicants disagree with this interpretation of Colby and submit that Colby teaches the derivation QoS specifications by defining eight QoS classes and *then* assigning one of the pre-defined QoS classes to a flow based on the flow's calculated QoS

requirements. Thus, according to Colby, eight QoS classes are defined first without regard to the particular data flows. After these QoS classes are defined, one of them is then assigned to a data flow based on the requirements of the flow. Nowhere does Colby disclose or suggest generating the eight QoS classes by implication based on relations between components, control flows, data flows, and resources.

Applicants respectfully submit that, even if combined, the teachings of Bachman and Colby do not disclose or suggest, at least, a quality of service specification derivation element in which a quality of service specification is derived by *implication* from relations between components, control flows, data flows, and resources as recited in Claims 1 and 18.

For at least the foregoing reasons, Applicant respectfully requests that the present application be reviewed and that the rejection of independent Claims 1 and 18 be reversed by the appeal conference prior to the filing of an appeal brief.

Respectfully submitted,


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